

Main Office:

427 Moreland Avenue, NE, Suite 100
Atlanta, GA 30307
404-659-5675 (phone) 770-234-3909 (fax)
georgia@cleanenergy.ws



www.cleanenergy.ws

Savannah Office:

3025 Bull Street, Suite 101
Savannah, GA 31405
912-201-0354 (phone and fax)
savannah@cleanenergy.ws

July 5, 2001

010352

RECEIVED

JUL 11 2001

Carol Hanlon
S&ER Projects Manager
U.S. Department of Energy
Yucca Mountain Site Characterization Office
P.O. Box 30307, M/S 025
North Las Vegas, NV 89036-0307
YMP_SR@ymp.gov

Dr. Jane R. Summerson, EIS Document Manager
Yucca Mountain Site Characterization Office
Office of Civilian Radioactive Waste Management
U.S. Department of Energy
P.O. Box 30307, M/S 010
North Las Vegas, NV 89036-0307
eis_r@ymp.gov

**COMMENTS ON (1) SUPPLEMENT TO DRAFT ENVIRONMENTAL IMPACT
STATEMENT FOR GEOLOGIC REPOSITORY FOR THE DISPOSAL OF SPENT
NUCLEAR FUEL AND HIGH-LEVEL RADIOACTIVE WASTE AT YUCCA MOUNTAIN,
NYE COUNTY, NEVADA AND (2) YUCCA MOUNTAIN SCIENCE & ENGINEERING
REPORT: TECHNICAL INFORMATION SUPPORTING SITE RECOMMENDATION
CONSIDERATION**

Georgians for Clean Energy is a non-profit, statewide membership organization that strives to protect air and water resources by changing how energy is produced and consumed. We are based in Atlanta, Georgia and have a field office in Savannah.

1 The Department of Energy (DOE) must state publicly that the only solution to dealing with nuclear waste is to halt the generation of nuclear waste which involves shutting down all commercial and military/research nuclear reactors along with all of the DOE's nuclear weapons plants. |

Continued Waste Generation

2... Georgians for Clean Energy is very familiar locally with the overflowing volumes of highly radioactive nuclear waste. | Plant Hatch, in South Georgia, has reached its maximum capacity of

...2 spent fuel. As a result of continued generation of nuclear waste at the site, plant operator Southern Nuclear Operating Company, a subsidiary of the Southern Company, pursued development of an on-site dry cask storage dump along the Altamaha River where the plant is situated—the second largest watershed on the East Coast.

The Georgia Public Service Commission, the Nuclear Regulatory Commission (NRC), and the DOE have allowed for the ongoing generation of nuclear waste at Plant Hatch despite lack of storage capacity for spent fuel on site or at other nuclear sites. Plant Hatch has the capacity to threaten the economic livelihood of not only South Georgia but also the region since it could also expand into a regional radioactive waste dump. Ongoing radioactive waste generation will only exacerbate this problem. This unacceptable situation is now occurring across the nation at increasing numbers of reactor sites. To knowingly allow the highly radioactive waste to increase while knowing that there truly is no feasible way to properly isolate the waste is unconscionable. Moreover, for state and federal agencies to even consider the possibility of new nuclear power plants is completely irresponsible.

The public disservice of allowing more nuclear waste generation is glaringly obvious in the Science & Engineering Report (S&ER) statement, “The National Waste Policy Act (NWPA) limits the amount of spent nuclear fuel and high-level radioactive waste that can be emplaced in the nation’s *first geologic repository* to 70,000 metric tons of heavy metal (MTHM) until a *second repository* is in operation.” The report goes on to say that the current nuclear waste amounts could more than double by 2035 “if all currently operating plants complete their initial 40-year license period.” This essentially guarantees that at least two federal nuclear waste dumps will be needed if initial operating licenses are fully implemented, not to mention what will be needed if new nuclear plants are built or existing plants are allowed to extend their operating licenses.

Additional Repositories

3 Georgians for Clean Energy requests answers on where the “nation’s first geologic repository,” and “second repository” are likely to be sited, assuming that Yucca Mountain will not be recommended—or at least a list of what locations are possible candidates.

Additionally, we would like to know how funding will be secured for these additional repositories as many utilities, state public service commissions, and others are already in the midst of lawsuits objecting to their need to fund and the delay in having a national geologic repository available for the generated waste.

High Level Liquid Radioactive Waste Storage

4... Furthermore, we are very interested to know how all of the DOE’s liquid high level radioactive waste (HLW) streams will be handled. There are currently more than 100 million gallons of HLW at DOE sites—with the highest radioactivity content at the Savannah River Nuclear Site (SRS) just across Georgia’s border near Aiken, SC. And the majority of tanks at SRS and other DOE sites are not actually below ground as the S&ER states, but above ground. In a DOE FY2000 Environmental Management database, future HLW generation from 2000-2070 was projected to be 334,000 m³ with 95% of that generated at SRS. How much HLW from SRS is

...4 slated for Yucca Mountain? How and where will future waste generation at DOE weapon sites be stored? |

Plutonium Bomb Fuel / Immobilization

5 SRS is also slated for the potential production of plutonium bomb fuel from weapons plutonium, also known as mixed oxide fuel (MOX), to be used as fuel in commercial nuclear power plants currently in the Southeast; currently, unlike what is stated in the S&ER, plans to immobilize the other portion of weapons plutonium have been suspended. What are the potential impacts of storing spent plutonium bomb fuel in a geologic repository such as Yucca Mountain? Are there special requirements for storing this type of fuel that are different from traditional uranium-based spent nuclear fuel? If studies have not been done to address these concerns, why not? Since immobilization is not being pursued steadfastly by the DOE, the S&ER needs to be amended to reflect the possible need for either more spent plutonium bomb fuel to be stored or perhaps a means to store the weapons plutonium that is not suitable for use in plutonium bomb fuel. |

Permanent Disposal

6 Georgians for Clean Energy urges that the waste needs to be disposed of permanently. Though supposedly "many believe that the recoverable uranium-235 and other fissionable isotopes in spent nuclear fuel could be a future energy resource, and should not be irreversibly disposed until their potential economic value is certain" (S&ER P. 1-15) we already know what the value would be to future generations—a substantial net loss. Reprocessing still generates highly radioactive waste. If the nuclear waste we have now is going to be isolated, it has to be isolated from future civilizations permanently, or as "permanent" as permanent can mean when dealing with materials that are hazardous for essentially forever. Contrary to the NWPA, the DOE should not be allowed to decide whether or not it could retrieve wastes after they have been placed in the repository (P. 1-16). |

Outdoor Facilities

7 The North Portal Repository Operations Area facilities, along with other outdoor areas, need to be situated inside some sort of structure or building. It is not safe to have casks sitting outdoors on a cement storage slab. The casks are a prime terrorist target, stream radiation into the surrounding environment, increase the radiation exposure to workers, and are susceptible to natural disasters and severe weather, including excessive heat. Though the NRC has licensed several outdoor cement-storage pads for dry casks, including the Independent-Spent Fuel Storage Installation (ISFSI) at Plant Hatch, it does not mean that this ill-advised practice has to occur at the federal repository as well. |

Worker and Civilian Protection

8 The exclusion zone needs to be expanded to more adequately protect the surrounding residents.

Sand filters need to be used in all ventilation shaft locations throughout the facility. The greatest technological measures need to be taken to ensure worker safety and the prevention of radioactive releases to the surrounding region. HEPA filters are not an adequate alternative. We are interested in how these filters will be disposed when their effectiveness expires. |

Radiation Monitoring

9 Since Yucca Mountain is located in the Nevada Test Site, the area is already contaminated from the fallout from nuclear weapons testing. How are natural background levels determined when past contamination is already present? Radioactive dose calculations, both for on-site and off-site exposures, should be compared to natural background radiation levels prior to weapons testing to more accurately determine the levels of radiation that are predicted to come from storing of nuclear wastes on the site.

Environmental Justice

In terms of Environmental Justice, we find it hard to believe that the "DOE will continue its protection of Native American sacred sites, cultural resources, and potential traditional cultural properties" if it is still intent on having Yucca Mountain as the first federal repository since it is considered a sacred site to begin with (Supplement to the Draft Environmental Impact Statement [SDEIS] P. 3-16). Additionally, the SDEIS states, "several known archeological sites could be affected by ground-disturbing activities associated with the construction of the surface aging facility" (P. 3-9). "Reducing adverse effects to the resources" does not mean the same as "continue its protection of Native American sacred sites, cultural resources." How does the DOE determine that a decision made by our society today will not irreversibly negatively impact future generations of Native Americans? They have already been impacted by the Nevada Test Site, so why should they be the host community to an ill-conceived nuclear waste dump that will plague this location for essentially eternity?


Summary

Georgians for Clean Energy does not support the use of Yucca Mountain as a geologic repository to store various forms of nuclear waste. From a scientific perspective, the site is not sound and is simply not capable of isolating the wastes for the full extent of their hazardous lifetimes. It is clear from the S&ER report and the SDEIS that Yucca Mountain will fail to protect future generations from the current and past decades of nuclear waste generation.

It is for that reason that all agencies involved, especially the DOE, must demand that all nuclear waste generation cease in order to lessen the burden on future societies. It is the most responsible decision that can be made and the only decision that will truly prevent future pollution from devastating our natural resources.

If you have any questions or concerns regarding our comments, please do not hesitate to contact Sara Barczak at (912) 201-0354 or Rita Kilpatrick at (404) 659-5675.

Sincerely,


Sara Barczak
Safe Energy Director
Georgians for Clean Energy